WHAT IS CLAIMED:

1. An apparatus for reinforcing at least a portion of an endocardial surface of a ventricle in a human heart, comprising:

a reinforcing element configured to have a first predetermined shape and a second predetermined shape, wherein the reinforcing element is configured to change from the first predetermined shape to the second predetermined shape while in a left or right ventricle of a human heart, wherein the first predetermined shape is configured to allow the reinforcing element to be moved through a human vasculature to the heart, and wherein the second predetermined shape is configured to reinforce at least a portion of an endocardial surface of a ventricle of the human heart during use.

2. The apparatus of claim 1, wherein the reinforcing element is configured to inhibit expansion of an average of an endocardial surface over a cardiac cycle of the left or right ventricle.

3. The apparatus of claim 1, wherein the reinforcing element is configured to inhibit expansion of an endocardial surface such that normal contraction and expansion during a cardiac cycle of the heart remains substantially unimpeded.

4. The apparatus of claim 1, wherein the reinforcing element is configured to attach to a portion of the endocardial surface of the ventricle of the heart.

5. The apparatus of claim 1, wherein a diameter of the second predetermined shape is larger than a diameter of the first predetermined shape.

6. The apparatus of claim 1, wherein the reinforcing element is configured to releasably attach to a portion of the endocardial surface of the heart.

7. The apparatus of claim 1, further comprising an adjustment mechanism, wherein the adjustment mechanism is configured, upon activation, to change a dimension of at least a portion of the reinforcing element.

8. The apparatus of claim 1, further comprising an adjustment mechanism, wherein the adjustment mechanism is configured, upon activation, to change a dimension of at least a portion of the reinforcing element, and to thereby change a dimension of a least a portion of the ventricle.

9. The apparatus of claim 1, further comprising an adjustment mechanism, wherein the adjustment mechanism is configured, upon activation, to change a dimension of at least a portion of the reinforcing element, and further comprising an engagement mechanism configured to inhibit the activated adjustment mechanism from moving.

10. The apparatus of claim 1, further comprising an activation mechanism, wherein the activation mechanism is configured to attach the reinforcing element to a portion of the endocardial surface of the heart.

11. The apparatus of claim 1, wherein the reinforcing element comprises a patch.

12. The apparatus of claim 1, wherein the second predetermined shape substantially emulates a shape and size of a portion of a left ventricle.

13. The apparatus of claim 1, wherein the reinforcing element comprises shape memory materials.

14. The apparatus of claim 1, wherein the reinforcing element comprises nitinol.

15. The apparatus of claim 1, wherein the portion of the endocardial surface comprises at least some scar tissue.

16. The apparatus of claim 1, wherein the reinforcing element comprises:

a plurality of conduits that form the first predetermined shape, the second predetermined shape, or the first predetermined shape and the second predetermined shape; and

at least one elongated member positionable in one or more of the plurality of conduits, wherein at least one such elongated member is configured to at least partially extend beyond a distal end of the corresponding conduit and to engage the portion of the endocardial surface when activated.

17. The apparatus of claim 16, wherein the plurality of conduits comprises variable length conduits.

18. The apparatus of claim 16, wherein at least one elongated member is configured to change shape upon extending beyond the corresponding conduit.

19. The apparatus of claim 16, wherein at least one elongated member is configured to change shape upon extending beyond the distal end of the corresponding conduit, and wherein the elongated member changes shape such that the elongated member extends away from a center axis of the reinforcing element.

20. The apparatus of claim 16, further comprising one or more support elements, wherein at least one of the support elements couples two or more of the conduits to each other.

21. The apparatus of claim 16, further comprising one or more support elements, wherein at least one of the support elements couples two or more of the conduits to each other, and wherein the support elements are configured to inhibit the reinforcing element from expanding beyond the second predetermined shape during use.

22. The apparatus of claim 16, wherein at least two of the conduits radiate from a center region.

23. The apparatus of claim 22, wherein the center region functions as a coupling region for two or more of the conduits.

24. The apparatus of claim 22, wherein the center region comprises an opening configured to allow at least a guidewire to pass through the center region, and wherein the guidewire is configured to facilitate positioning of the reinforcing element on the endocardial surface.

25. The apparatus of claim 22, wherein the center region comprises a structure with an opening, wherein the opening is configured to allow a guidewire to pass through it.

26. The apparatus of claim 22, further comprising a flexible conduit comprising a distal end configured to be inserted in a vasculature of a human body and positioned in a ventricle of the human heart.

27. The apparatus of claim 22, further comprising a guidewire positionable in a flexible conduit, wherein the guidewire is configured to extend beyond a distal end of the flexible conduit during use, and wherein the guidewire is configured to releasably attach to an endocardial surface of the heart.

28. An apparatus for reinforcing at least a portion of a human heart, comprising a reinforcing element having a first predetermined shape and second predetermined shape, wherein the reinforcing element is configured to attach to a portion of an endocardial surface of the heart to inhibit expansion of an average of an endocardial surface over a cardiac cycle of the heart.

29. The apparatus of claim 28, wherein the reinforcing element is configurable to releasably attach to a portion of the endocardial surface of the heart.

30. The apparatus of claim 28, wherein a left or right ventricle comprises the portion of the endocardial surface of the heart.

31. The apparatus of claim 28, wherein the reinforcing element comprises a patch.

32. The apparatus of claim 28, wherein the second predetermined shape of the reinforcing element substantially emulates a shape and size of a portion of a left or right ventricle.

33. The apparatus of claim 28, wherein the second predetermined shape of the reinforcing element substantially emulates a shape or size of a portion of a left or right ventricle.

34. The apparatus of claim 28, wherein the reinforcing element is configured to inhibit expansion of an endocardial surface such that normal contraction and expansion during a cardiac cycle of the heart remains substantially unimpeded.

35. The apparatus of claim 28, wherein the reinforcing element comprises shape memory materials.

36. The apparatus of claim 28, wherein the reinforcing element comprises nitinol.

37. The apparatus of claim 28, wherein the portion of the endocardial surface comprises at least some scar tissue.

38. The apparatus of claim 28, further comprising an adjustment mechanism, wherein the adjustment mechanism is configured, upon activation, to change a dimension of at least a portion of the reinforcing element.

39. The apparatus of claim 28, further comprising an adjustment mechanism, wherein the adjustment mechanism is configured, upon activation, to change a dimension of at least

a portion of the reinforcing element, and to thereby change a dimension of a least a portion of the ventricle.

40. The apparatus of claim 28, further comprising an adjustment mechanism, wherein the adjustment mechanism is configured, upon activation, to change a dimension of at least a portion of the reinforcing element, and to thereby change a dimension of a least a portion of the ventricle, and further comprising an engagement mechanism configured to inhibit the activated adjustment mechanism from moving.

41. The apparatus of claim 28, wherein the reinforcing element comprises:

a plurality of conduits that form the first predetermined shape, the second predetermined shape, or the first predetermined shape and the second predetermined shape; and

at least one elongated member positionable in one or more of the plurality of conduits, wherein at least one such elongated member is configurable to at least partially extend beyond a distal end of the corresponding conduit when activated to engage the portion of the endocardial surface of the heart.

42. The apparatus of claim 41, wherein the plurality of conduits comprises variable length conduits.

43. The apparatus of claim 41, wherein at least one elongated member is configured to change shape upon extending beyond the corresponding conduit.

44. The apparatus of claim 41, wherein at least one elongated member is configured to change shape upon extending beyond the distal end of the corresponding conduit, and wherein the elongated member change shape such that the elongated member extends away from a center axis of the reinforcing element.

45. The apparatus of claim 41, further comprising one or more support elements, wherein at least one of the support elements couples two or more of the conduits to each other.

46. The apparatus of claim 41, further comprising one or more support elements, wherein at least one of the support elements couples two or more of the conduits to each other, and wherein the support elements are configurable to inhibit the reinforcing element from expanding beyond the second predetermined shape during use.

47. The apparatus of claim 41, wherein at least two of the conduits radiate from a center region.

48. The apparatus of claim 47, wherein the center region functions as a coupling region for two or more of the conduits.

49. The apparatus of claim 47, wherein the center region comprises an opening configured to allow at least a guidewire to pass through the center region, and wherein the guidewire is configured to facilitate positioning of the reinforcing element on the endocardial surface.

50. The apparatus of claim 47, wherein the center region comprises a structure with an opening, wherein the opening is configured to allow a guidewire to pass through it.

51. The apparatus of claim 28, further comprising a flexible conduit comprising a distal end configured to be inserted in a vasculature of a human body and positioned in a ventricle of the human heart.

52. The apparatus of claim 28, further comprising a guidewire positionable in a flexible conduit, wherein the guidewire is configured to extend beyond a distal end of the flexible conduit during use, and wherein the guidewire is configured to releasably attach to an endocardial surface of the heart.

53. An apparatus for reinforcing at least a portion of a human heart, comprising:

a reinforcing element having a predetermined shape, wherein the reinforcing element is configured to inhibit expansion of an average of an endocardial surface over a cardiac cycle of the heart during use, and wherein the reinforcing element comprises:

a plurality of conduits that form the predetermined shape during use; and

at least one elongated member positionable in one or more of the plurality of conduits, wherein at least one such elongated member is configured to at least partially extend beyond a distal end of the corresponding conduit when activated to engage the portion of the endocardial surface.

54. The apparatus of claim 53, wherein the reinforcing element is configured to inhibit expansion of an endocardial surface such that normal contraction and expansion during a cardiac cycle of the heart remains substantially unimpeded.

55. The apparatus of claim 53, wherein the plurality of conduits comprises variable length conduits.

56. The apparatus of claim 53, further comprising an adjustment mechanism, wherein the adjustment mechanism is configured to change a dimension of at least a portion of the reinforcing element.

57. The apparatus of claim 53, further comprising an adjustment mechanism, wherein the adjustment mechanism is configured, upon activation, to change a dimension of at least a portion of the reinforcing element, and to thereby change a dimension of a least a portion of the ventricle.

58. The apparatus of claim 53, further comprising an adjustment mechanism, wherein the adjustment mechanism is configured, upon activation, to change a dimension of at least a portion of the reinforcing element, and to thereby change a dimension of a least a portion

of the ventricle, and further comprising an engagement mechanism configured to inhibit the activated adjustment mechanism from moving.

59. The apparatus of claim 53, wherein the predetermined shape substantially emulates a shape and size of a portion of a left ventricle.

60. The apparatus of claim 53, wherein the portion of the endocardial surface comprises at least some scar tissue.

61. The apparatus of claim 53, wherein the reinforcing element is configurable to releasably attach to the portion of the endocardial surface of the heart.

62. The apparatus of claim 53, wherein the plurality of conduits vary in length such that the conduits substantially conform to the predetermined shape.

63. The apparatus of claim 53, wherein at least one elongated member is configured to change shape upon extending beyond the corresponding conduit.

64. The apparatus of claim 53, wherein at least one elongated member is configured to change shape upon extending beyond the distal end of the corresponding conduit, and wherein the elongated member change shape such that the elongated member extends away from a center axis of the reinforcing element.

65. The apparatus of claim 53, wherein the reinforcing element comprises shape memory materials.

66. The apparatus of claim 53, wherein the reinforcing element comprises nitinol.

67. The apparatus of claim 53, wherein at least two of the conduits radiate from a center region.

68. The apparatus of claim 67, wherein the center region functions as a coupling region for two or more of the conduits.

69. The apparatus of claim 67, wherein the center region comprises an opening configured to allow at least a guidewire to pass through the center region, and wherein the guidewire is configured to facilitate positioning of the reinforcing element on the endocardial surface.

70. The apparatus of claim 67, wherein the center region comprises a structure with an opening, wherein the opening is configured to allow a guidewire to pass through it.

71. The apparatus of claim 53, further comprising one or more support elements, wherein at least one of the support elements couples two or more of the conduits to each other.

72. The apparatus of claim 53, further comprising one or more support elements, wherein at least one of the support elements couples two or more of the conduits to each other, and wherein the support elements are configurable to inhibit the reinforcing element from expanding beyond the predetermined shape during use.

73. The apparatus of claim 53, further comprising a flexible conduit comprising a distal end configured to be inserted in a vasculature of a human body and positioned in a ventricle of the human heart.

74. The apparatus of claim 53, further comprising a guidewire positionable in a flexible conduit, wherein the guidewire is configured to extend beyond a distal end of the flexible conduit during use, and wherein the guidewire is configured to releasably attach to an endocardial surface of the heart.

75. A system for reinforcing at least a portion of a human heart, comprising:

a flexible conduit comprising a distal end configured to be inserted in a vasculature of a human body and positioned in a ventricle of the human heart;

a guidewire positionable in the flexible conduit, wherein the guidewire is configured to extend beyond the distal end of the flexible conduit during use, and wherein the guidewire is configured to releasably attach to an endocardial surface of the heart; and

a reinforcing element comprising a first predetermined shape positionable in the flexible conduit, wherein the reinforcing element is configured to change to a second predetermined shape and attach to a portion of the endocardial surface of a left or right ventricle of the heart, and wherein the reinforcing element is configured to inhibit expansion of an average of an endocardial surface over a cardiac cycle.

76. The system of claim 75, wherein the reinforcing element is configured to inhibit expansion of an endocardial surface such that normal contraction and expansion during a cardiac cycle of the heart remains substantially unimpeded.

77. The system of claim 75, wherein the reinforcing element is configured to releasably attach to the portion of the endocardial surface of the heart.

78. The system of claim 75, wherein the reinforcing element comprises a patch.

79. The system of claim 75, wherein the second predetermined shape substantially emulates a shape and size of a portion of a left ventricle.

80. The system of claim 75, wherein the guidewire comprises a coupling mechanism positioned towards a distal end of the guidewire.

81. The system of claim 75, wherein the guidewire comprises a needle nose tipped guidewire.

82. The system of claim 75, wherein the reinforcing element comprises an adjustment mechanism, wherein the adjustment mechanism is configured to change a dimension of at least a portion of the reinforcing element upon activation.

83. The system of claim 75, further comprising an adjustment mechanism, wherein the adjustment mechanism is configured, upon activation, to change a dimension of at least a portion of the reinforcing element, and to thereby change a dimension of a least a portion of the ventricle.

84. The system of claim 75, further comprising an adjustment mechanism, wherein the adjustment mechanism is configured, upon activation, to change a dimension of at least a portion of the reinforcing element, and to thereby change a dimension of a least a portion of the ventricle, and further comprising an engagement mechanism configured to inhibit the activated adjustment mechanism from moving.

85. The system of claim 75, wherein the reinforcing element comprises shape memory materials.

86. The system of claim 75, wherein the reinforcing element comprises nitinol.

87. The system of claim 75, wherein the reinforcing element comprises:

a plurality of conduits that form the first predetermined shape, the second predetermined shape, or the first predetermined shape and the second predetermined shape; and

at least one elongated member positionable in one or more of the plurality of conduits, wherein at least one such elongated member is configurable to at least partially extend beyond a distal end of the corresponding conduit when activated to engage the portion of the endocardial surface.

88. The system of claim 87, wherein the plurality of conduits comprises variable length conduits.

89. The system of claim 87, wherein at least one elongated member is configured to change shape upon extending beyond the corresponding conduit.

90. The system of claim 87, wherein at least one elongated member is configured to change shape upon extending beyond the distal end of the corresponding conduit, and wherein the elongated member change shape such that the elongated member extends away from a center axis of the reinforcing element.

91. The system of claim 87, further comprising one or more support elements, wherein at least one of the support elements couples two or more of the conduits to each other.

92. The system of claim 87, further comprising one or more support elements, wherein at least one of the support elements couples two or more of the conduits to each other, and wherein the support elements are configurable to inhibit the reinforcing element from expanding beyond the second predetermined shape during use.

93. The system of claim 87, wherein at least two of the conduits radiate from a center region.

94. The system of claim 93, wherein the center region functions as a coupling region for two or more of the conduits.

95. The system of claim 93, wherein the center region comprises an opening configured to allow at least a guidewire to pass through the center region, and wherein the guidewire is configured to facilitate positioning of the reinforcing element on the endocardial surface.

96. The system of claim 93, wherein the center region comprises a structure with an opening, wherein the opening is configured to allow a guidewire to pass through it.

97. A method for reinforcing at least a portion of an endocardial surface of a human heart, comprising:

accessing an interior of a left or right ventricle of the human heart;

positioning a reinforcing element on at least a portion of the endocardial surface of the ventricle; and

releasably attaching the reinforcing element to a portion of the endocardial surface such that expansion of an average of an endocardial surface over a cardiac cycle is inhibited.

98. The method of claim 97, wherein releasably attaching the reinforcing element to a portion of the endocardial surface such that expansion of the average of an endocardial surface over a cardiac cycle comprises substantially unimpeding normal contraction and expansion of the heart.

99. The method of claim 97, wherein accessing an interior of a ventricle of the human heart comprises:

inserting a distal end of a catheter percutaneously into a vasculature of a human body;

positioning at least a portion of the distal end of the catheter in the left or right ventricle; and

deploying the reinforcing element from the distal end of the catheter.

100. The method of claim 97, further comprising adjusting a diameter of at least a portion of the reinforcing element using an adjustment mechanism.

101. The method of claim 97, further comprising adjusting a dimension of at least a portion of the reinforcing element using an adjustment mechanism.

102. The method of claim 97, further comprising adjusting a dimension of at least a portion of the reinforcing element using an adjustment mechanism, and to thereby change a dimension of a least a portion of the ventricle.

103. The method of claim 97, further comprising adjusting a dimension of at least a portion of the reinforcing element using an adjustment mechanism, and to thereby change a dimension of a least a portion of the ventricle, and further comprising inhibiting movement of the activated adjustment mechanism using an engagement mechanism.

104. The method of claim 97, wherein the endocardial surface comprises at least some akinetic tissue.

105. The method of claim 97, wherein the endocardial surface comprises at least some scar tissue.

106. The method of claim 97, further comprising removing the catheter from the left or right ventricle

107. The method of claim 97, wherein the reinforcing element comprises a patch.

108. The method of claim 97, wherein the reinforcing element is preshaped to substantially emulate a shape and size of a portion of the left or right ventricle.

109. The method of claim 97, further comprising assessing an affect of positioning the reinforcing element.

110. The method of claim 97, further comprising extending one or more elongated members of the reinforcing element beyond a distal end of one or more conduits of the reinforcing element to releasably attach the reinforcing element to a portion of the endocardial surface.

111. The method of claim 97, further comprising inserting a distal end of a guidewire percutaneously into a vasculature of a human body.

112. The method of claim 97, further comprising:

extending a distal end of a guidewire from a distal end of a catheter into the ventricle; and

attaching a coupling mechanism positioned towards the distal end of the guidewire to the portion of the endocardial surface to assist in positioning the reinforcing element on the endocardial surface.

113. The method of claim 97, further comprising:

inserting a distal end of a guidewire percutaneously into a vasculature of a human body; and

attaching a coupling mechanism positioned towards the distal end of the guidewire to the portion of the endocardial surface to assist in positioning the reinforcing element on the endocardial surface.

114. The method of claim 97, further comprising:

inserting a distal end of a guidewire percutaneously through the vasculature of a human body and in the left or right ventricle; and

extending a distal end of a catheter along the guidewire such that the distal end of the catheter is positioned in the left or right ventricle.

115. The method of claim 97, wherein a portion of the endocardial surface of the ventricle comprises at least some scar tissue..

116. A method of reinforcing at least a portion of a ventricle of a human heart, comprising attaching a reinforcing element to a region of an endocardial surface of the ventricle, wherein the reinforcing element is attached such that at least a portion of a natural contour of the region is maintained.

117. The method of claim 116, wherein the ventricle comprises a left or right ventricle of the human heart.

118. The method of claim 116, wherein the reinforcing element is coupled to the

endocardial surface of the ventricle after a major cardiovascular event.

119. The method of claim 116, wherein the reinforcing element is coupled to the endocardial surface of the ventricle after a myocardial infarction.

120. The method of claim 116, further comprising accessing an interior of the ventricle of the human heart.

121. The method of claim 120, wherein accessing the interior of the ventricle comprises:

inserting a distal end of a catheter percutaneously into a vasculature of a human body;

positioning at least a portion of the distal end of the catheter in the ventricle; and

deploying the reinforcing element from the distal end of the catheter.

122. The method of claim 121, further comprising removing the catheter from the ventricle

123. The method of claim 116, further comprising adjusting a diameter of at least a portion of the reinforcing element using an adjustment mechanism.

124. The method of claim 123, further comprising inhibiting movement of the adjustment mechanism using an engagement mechanism after adjusting the diameter of at least the portion of the reinforcing element.

125. The method of claim 116, further comprising adjusting a dimension of at least a portion of the reinforcing element using an adjustment mechanism.

126. The method of claim 116, further comprising adjusting a dimension of at least a portion of the reinforcing element using an adjustment mechanism, and to thereby change a dimension of a least a portion of the ventricle.

127. The method of claim 116, further comprising adjusting a dimension of at least a portion of the reinforcing element using an adjustment mechanism, and to thereby change a dimension of a least a portion of the ventricle, and further comprising inhibiting movement of the activated adjustment mechanism using an engagement mechanism.

128. The method of claim 116, wherein the endocardial surface comprises at least some akinetic tissue.

129. The method of claim 116, wherein the endocardial surface comprises at least some scar tissue.

130. The method of claim 116, wherein the reinforcing element comprises a preshaped patch.

131. The method of claim 116, wherein the reinforcing element comprises at least a first predetermined shape and a second predetermined shape.

132. The method of claim 131, wherein the second predetermined shape substantially emulate a shape and size of a portion of the ventricle.

133. The method of claim 116, further comprising assessing an affect of attaching the reinforcing element.

134. The method of claim 116, further comprising extending one or more elongated members of the reinforcing element beyond a distal end of one or more conduits of the reinforcing element to releasably attach the reinforcing element to a portion of the endocardial surface such that deformation of the portion of the endocardial surface is inhibited.

135. The method of claim 116, further comprising inserting a distal end of a guidewire percutaneously into a vasculature of a human body.

136. The method of claim 116, further comprising:

extending a distal end of a guidewire from a distal end of a catheter into the ventricle; and

attaching a coupling mechanism positioned towards the distal end of the guidewire to the portion of the endocardial surface to assist in positioning the reinforcing element on the endocardial surface.

137. The method of claim 116, further comprising:

inserting a distal end of a guidewire percutaneously into a vasculature of a human body; and

attaching a coupling mechanism positioned towards the distal end of the guidewire to the portion of the endocardial surface to assist in positioning the reinforcing element on the endocardial surface.

138. The method of claim 116, further comprising:

inserting a distal end of a guidewire percutaneously through the vasculature of the human body and in the ventricle; and

extending a distal end of a catheter along the guidewire such that the distal end of the catheter is positioned in the ventricle.

139. The method of claim 116, wherein the endocardial surface comprises at least some scar tissue from the ventricle.